



Joint Polar Satellite System (JPSS) Ground Project Algorithm Processes

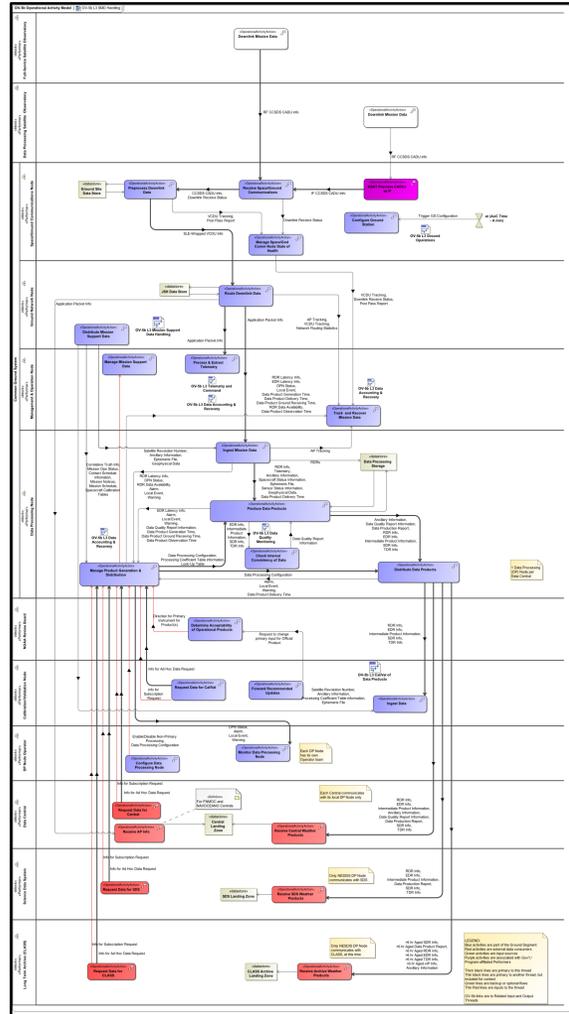


SV-4 Systems Functionality Flow Description Diagrams

Flow Description for Generating Sensor Data Records (SDRs)

Flow Description for Generating Environmental Data Records (EDRs)

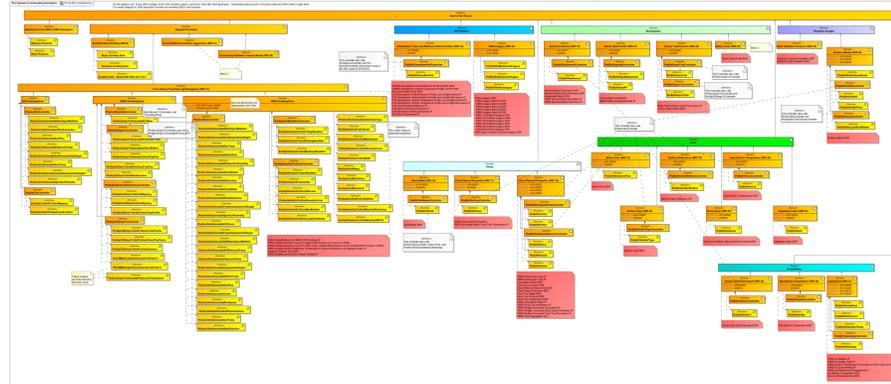
OV-5b Operational Activity Model for SMD



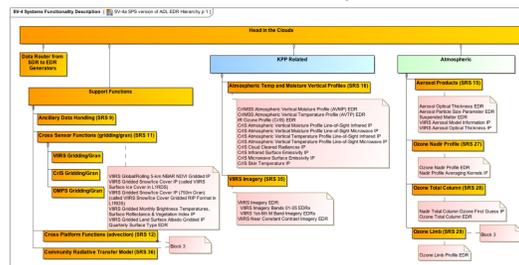
- The Operational Activities shown cover:
- Capturing Stored Mission Data (SMD)
 - Converting SMD into Sensor Data Records (SDRs) and Environmental Data Records (EDRs).
 - Distributing EDRs.

SV-4 System Functionality Description Hierarchy Diagrams

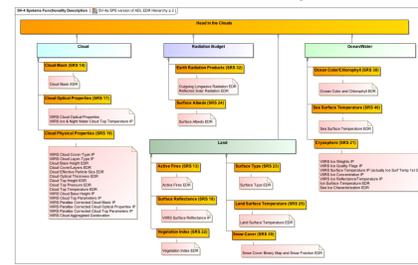
EDR Overall Hierarchy



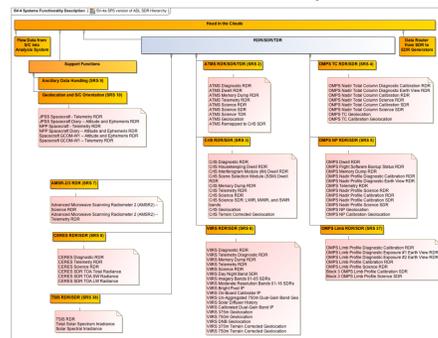
EDR Hierarchy 1



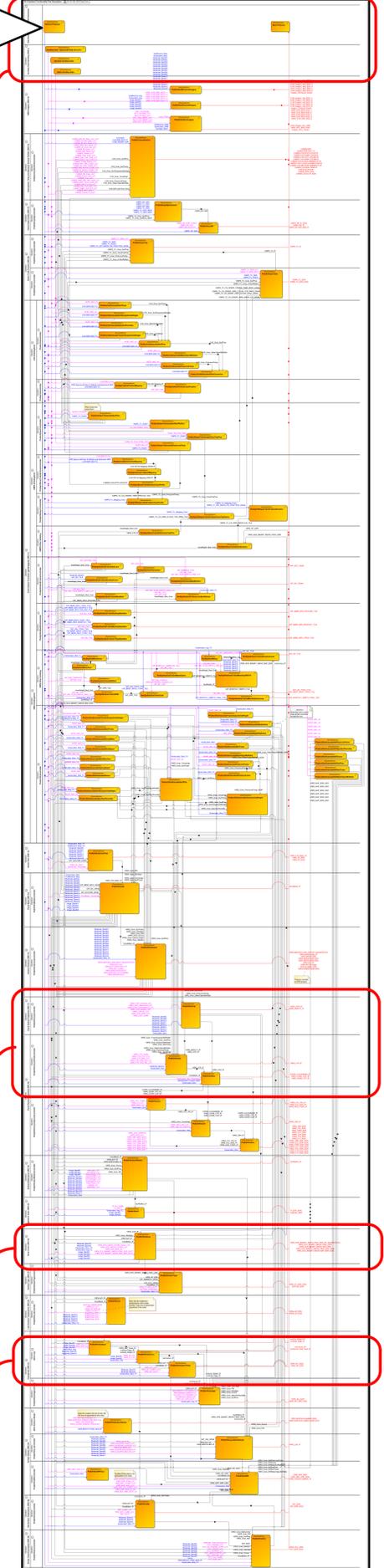
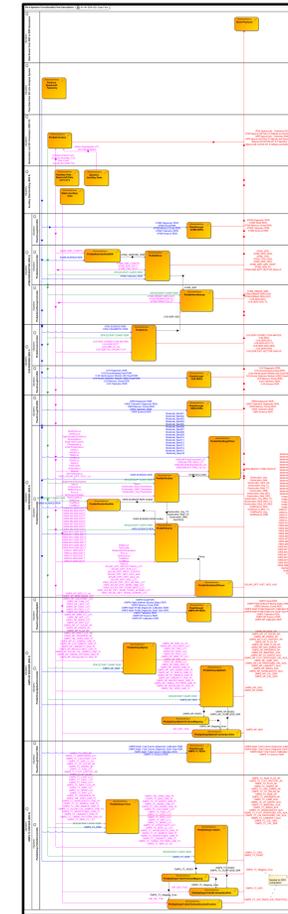
EDR Hierarchy 2



SDR Hierarchy

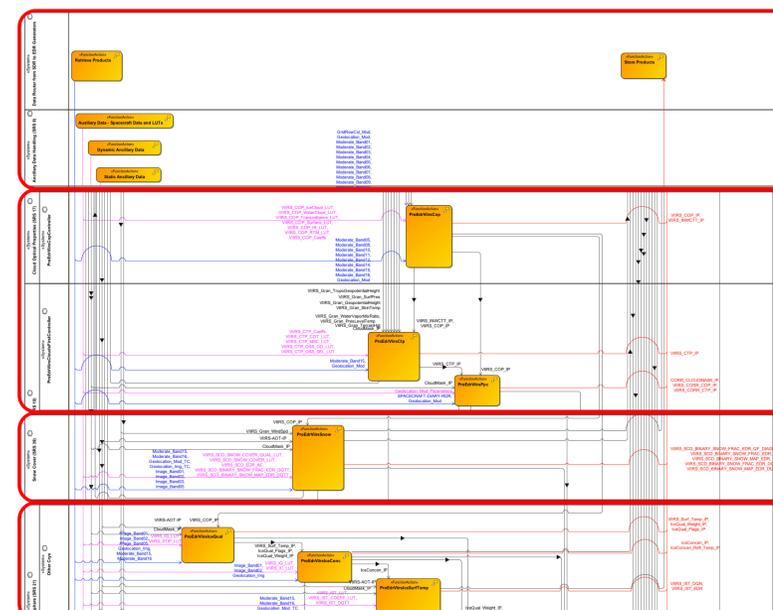


- Provide a hierarchical breakdown of the lower-level requirements and software functions for a project's processes.
- Provide for Systems Engineering requirements and Software Requirements Specification (SRS) tracking.
- Show software algorithms contained in lower level specifications, and the deliverable data products generated by a software process.



- Flow Views support Systems Engineering, software development, and end users.
- Inputs, outputs, and interdependencies are shown for each process.
- Horizontal swim lanes represent lower level specifications, with deliverable products at the far right.

Cloud Optical Properties Process Interfaces



SV-6 System Resource Flow Matrices

SV-6 Cloud Optical Properties (SRS 17)

#	Resource / Resource Item	Sending Referrer	Receiving Referrer	Producing Function	Consuming Function
1	<ul style="list-style-type: none"> • 0-100: Metadata_Band05 • 0-100: Metadata_Band06 • 0-100: Metadata_Band10 • 0-100: Metadata_Band11 • 0-100: Metadata_Band12 • 0-100: Metadata_Band14 • 0-100: Metadata_Band15 • 0-100: Metadata_Band16 • 0-100: Calibration_Metadata 	Data Reader from SDR to EDR Generators	ProdEnvCapController	Retrieve Products	ProdEnvCap
2	<ul style="list-style-type: none"> • 0-100: VRS_COP_AuxCloud_LIST • 0-100: VRS_COP_WaterCloud_LIST • 0-100: VRS_COP_Precipitation_LIST • 0-100: VRS_COP_Surface_LIST • 0-100: VRS_COP_Air_LIST • 0-100: VRS_COP_RTN_LIST • 0-100: VRS_COP_Cover 	Auxiliary Data Handling (SRS 1)	ProdEnvCapController	Auxiliary Data - Spacecraft Data and LUTs	ProdEnvCap
3	<ul style="list-style-type: none"> • 0-100: VRS_COP_SatTemp 	ProdEnvCapController	ProdEnvCapController	ProdEnvCapControllerSatTemp	ProdEnvCap
4	<ul style="list-style-type: none"> • 0-100: VRS_COP_PrecipitationRate 	ProdEnvCapController	ProdEnvCapController	ProdEnvCapPrecipRateProdEnvCap	ProdEnvCap
5	<ul style="list-style-type: none"> • 0-100: CloudMask_IP 	ProdEnvCapController	ProdEnvCapController	ProdEnvCapCloudMask	ProdEnvCap
6	<ul style="list-style-type: none"> • 0-100: VRS_COP_IP 	ProdEnvCapController	ProdEnvCapController	ProdEnvCapIP	ProdEnvCap
7	<ul style="list-style-type: none"> • 0-100: VRS_COP_IP 	ProdEnvCapController	ProdEnvCapController	ProdEnvCapIP	ProdEnvCap
8	<ul style="list-style-type: none"> • 0-100: VRS_COP_IP 	ProdEnvCapController	ProdEnvCapController	ProdEnvCapIP	ProdEnvCap
9	<ul style="list-style-type: none"> • 0-100: VRS_SMCCT_IP 	ProdEnvCapController	ProdEnvCapController	ProdEnvCapSMCCT	ProdEnvCap
10	<ul style="list-style-type: none"> • 0-100: VRS_COP_IP • 0-100: VRS_SMCCT_IP 	ProdEnvCapController	Data Reader from SDR to EDR Generators	ProdEnvCap	Store Products

Flow matrices provide a tabular view of the inputs, outputs, and internal software processes shown in the swimlanes of a SV-4 Functionality Flow View.

JPSS Ground Project Architecture Team

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